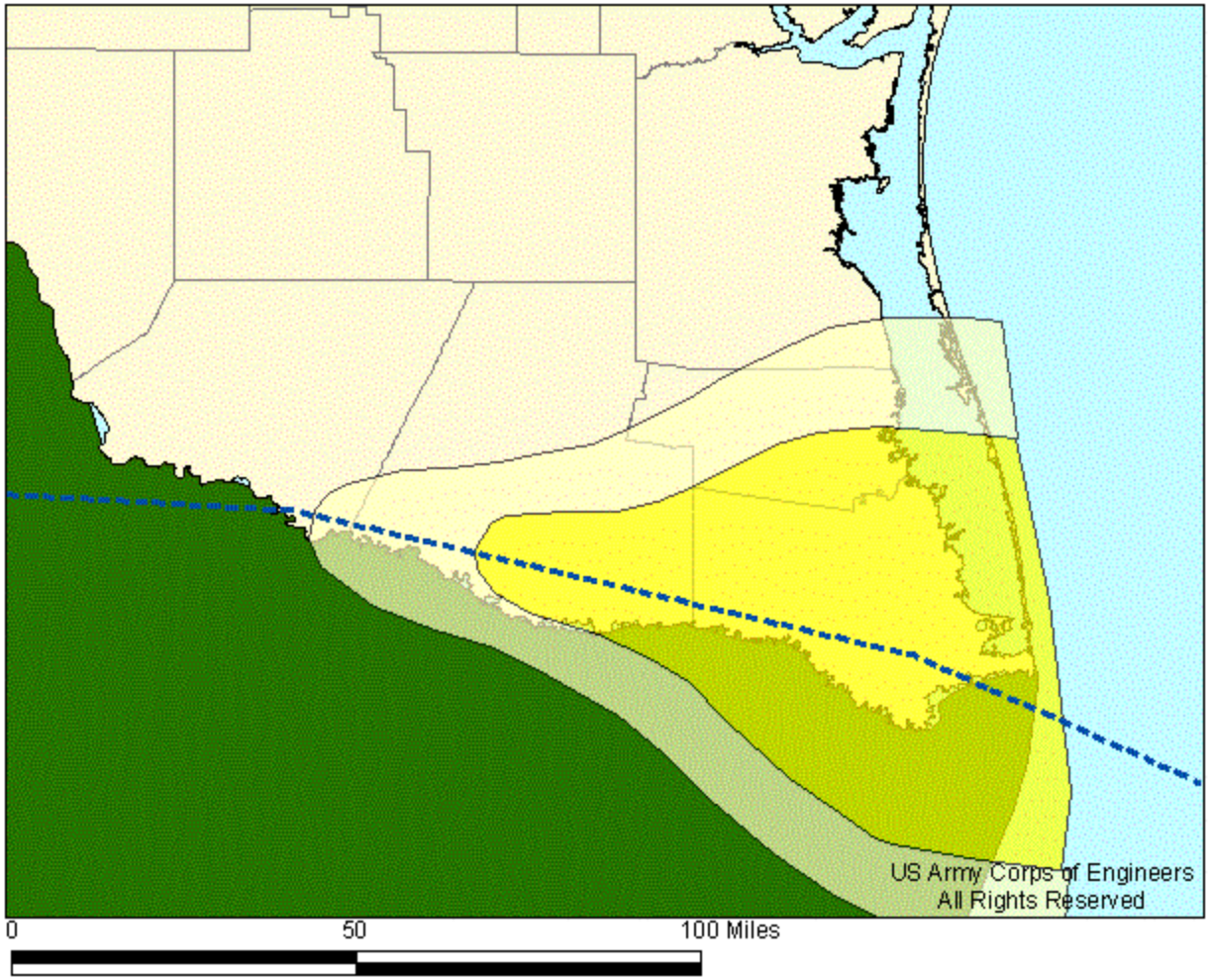
US Army Corps of Engineers

Hurricane dolly Projected Damage Areas

Landfall Expected In About 6 Hours

For Planning Purposes Only!



Post Landfall Projected Damage Areas

This model is based on a Category 1 storm making landfall near Brownsville, TX.

Forecast Track

Projected Damage Areas

- CAT 0-type damage
- CAT 1-type damage
- CAT 2-type damage
- CAT 3-type damage
- CAT 4-type damage
- CAT 5-type damage

Information provided on this page displays a Category 1 storm making landfall near Brownsville, TX. These projections are based on information from the NHC (0700 EDT 07/23/2008) forecast.

Details about this model may be obtained at http://www.englink.usace.army.mil or contact Louisville District staff at DLL-CELRL-GIS@usace.army.mil

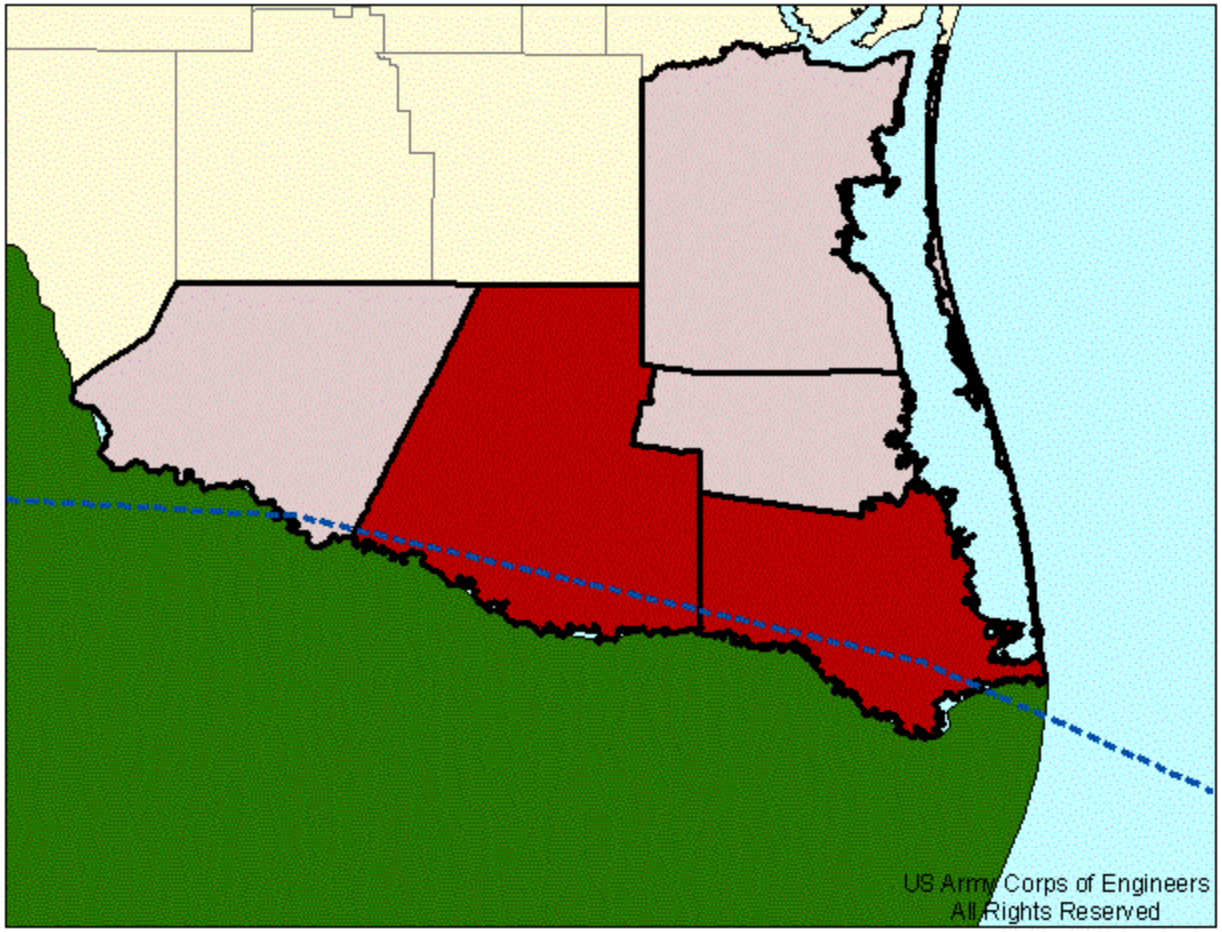
Hurricane dolly Projected Damage Areas	
Generated By: Siemsen, LRL 0730 EDT 07/23/2008	
Sources: HURREVAC LRL-DEBRIS	Page 1 of 19

US Army Corps of Engineers

Hurricane dolly Debris Model

Landfall Expected In About 6 Hours

For Planning Purposes Only!



Post Landfall Debris Model Results

Texas - 3,323,000 Yards

Model results per County on following page

This model is based on a Category 1 storm making landfall near Brownsville, TX.

Forecast Track

Debris

- < 100,000 cubic yards
- 100,000 - 249,999 cubic yards
- 250,000 - 499,999 cubic yards
- 500,000 - 999,999 cubic yards
- >1,000,000 cubic yards

Information provided on this page displays a Category 1 storm making landfall near Brownsville, TX. These projections are based on information from the NHC (0700 EDT 07/23/2008) forecast. The amount of debris forecasted is possible total volume, not necessarily the volume that may need to be removed with Federal funds, but does not include volume that may be covered by private insurance. Debris volume may include storm surge generated debris.

Details about this model may be obtained at http://www.englink.usace.army.mil or contact Louisville District staff at DLL-CELRL-GIS@usace.army.mil

Hurricane dolly Debris Model	
Generated By: Siemsen, LRL 0730 EDT 07/23/2008	
Sources: HURREVAC LRL-DEBRIS	

US Army Corps of Engineers

Hurricane dolly Debris Model

Landfall Expected In About 6 Hours

For Planning Purposes Only!

State	Yards per State	County	Yards per County
Texas		Cameron	1,288,000
		Hidalgo	1,986,000
		Kenedy	< 1,000
		Starr	5,000
		Willacy	44,000
Texas	3,323,000		

The amount of debris forecasted is possible total volume, not necessarily the volume that may need to be removed with Federal funds, but does not include volume that may be covered by private insurance. Debris volume may include storm surge generated debris.

Details about this model may be obtained at http://www.englink.usace.army.mil or contact Louisville District staff at DLL-CELRL-GIS@usace.army.mil

Source: US Army Corps of Engineers, All Rights Reserved

Hurricane dolly Debris Model

Generated By:
Siemsen, LRL 0730 EDT 07/23/2008

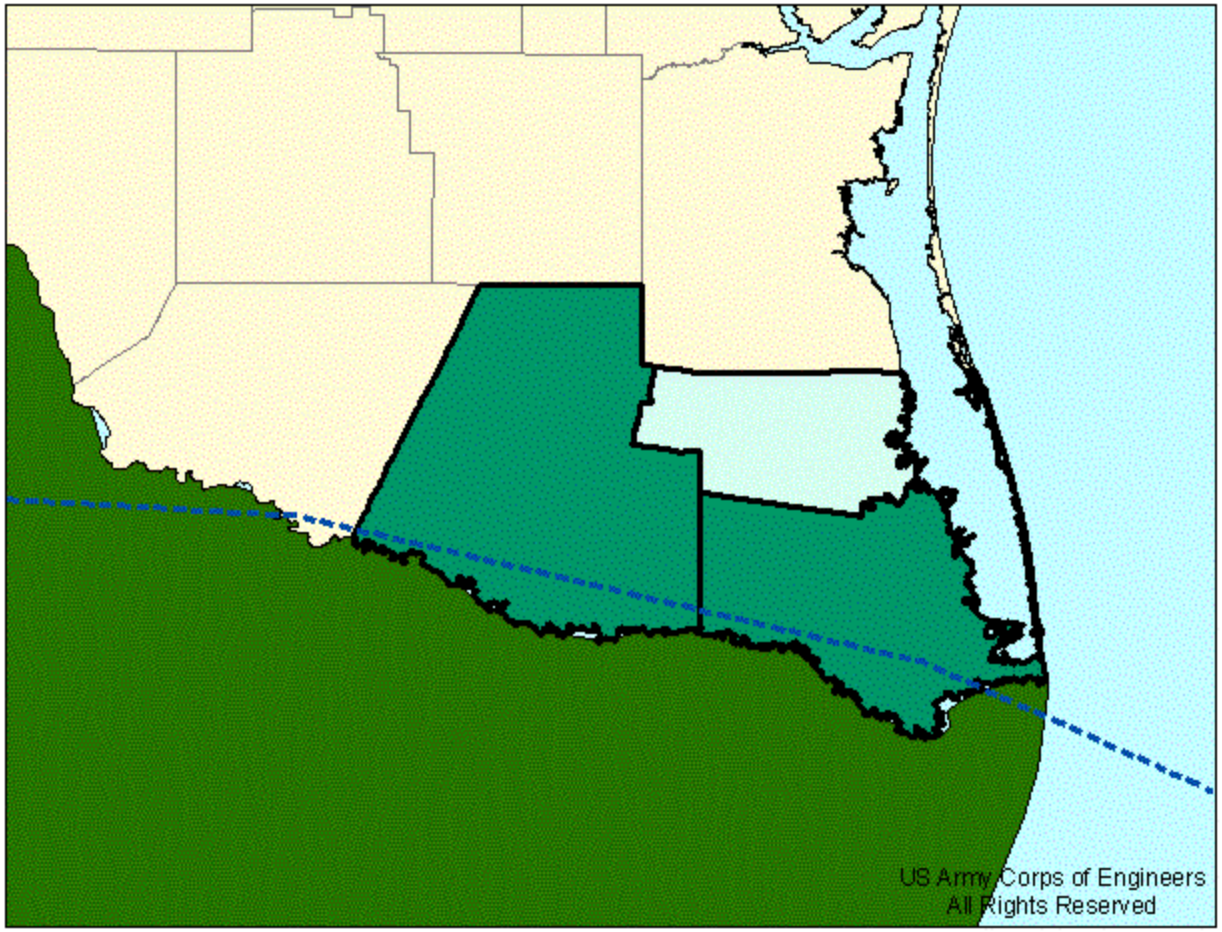
Sources:
HURREVAC
LRL-DEBRIS

US Army Corps of Engineers

Hurricane dolly Commodities Model

Landfall Expected In About 6 Hours

For Planning Purposes Only!



Post Landfall Water Model Results

Day One / Day Two / Day Three
Texas – 30/45/60 Truckloads

Model results per County on following page

This model is based on a Category 1 storm making landfall near Brownsville, TX.

Forecast Track

Commodities

- < 5 Trucks Each
- 5 - 10 Trucks Each
- 11 - 20 Trucks Each
- 21 - 40 Trucks Each
- > 40 Trucks Each

Information provided on this page displays a Category 1 storm making landfall near Brownsville, TX. These projections are based on information from the NHC ***(0700 EDT 07/23/2008)*** forecast. The amount of commodities forecasted is based on Mission Guide Book requirements and SME input. The graphic represents single day needs with full distribution system in place and operating.

Details about this model may be obtained at http://www.englink.usace.army.mil or contact Louisville District staff at DLL-CELRL-GIS@usace.army.mil

Hurricane dolly Commodities Model	
Generated By: Siemsen, LRL 0730 EDT 07/23/2008	
Sources: HURREVAC LRL-DEBRIS	Page 4 of 19

US Army Corps of Engineers

Hurricane dolly Commodities Model

Landfall Expected In About **6** Hours

For Planning Purposes Only!

State	Truckloads per State	County	Truckloads per County
Texas		Cameron	26
		Hidalgo	33
		Willacy	1
Texas	60		

The amount of commodities forecasted is based on Mission Guide Book requirements and SME input and the above table indicates suggested needs based on phased deployment of a commodities distribution system.

Details about this model may be obtained at http://www.englink.usace.army.mil
or contact Louisville District staff at DLL-CELRL-GIS@usace.army.mil

Source: US Army Corps of Engineers, All Rights Reserved

Hurricane dolly Commodities Model

Generated By:
Siemsen, LRL 0730 EDT 07/23/2008

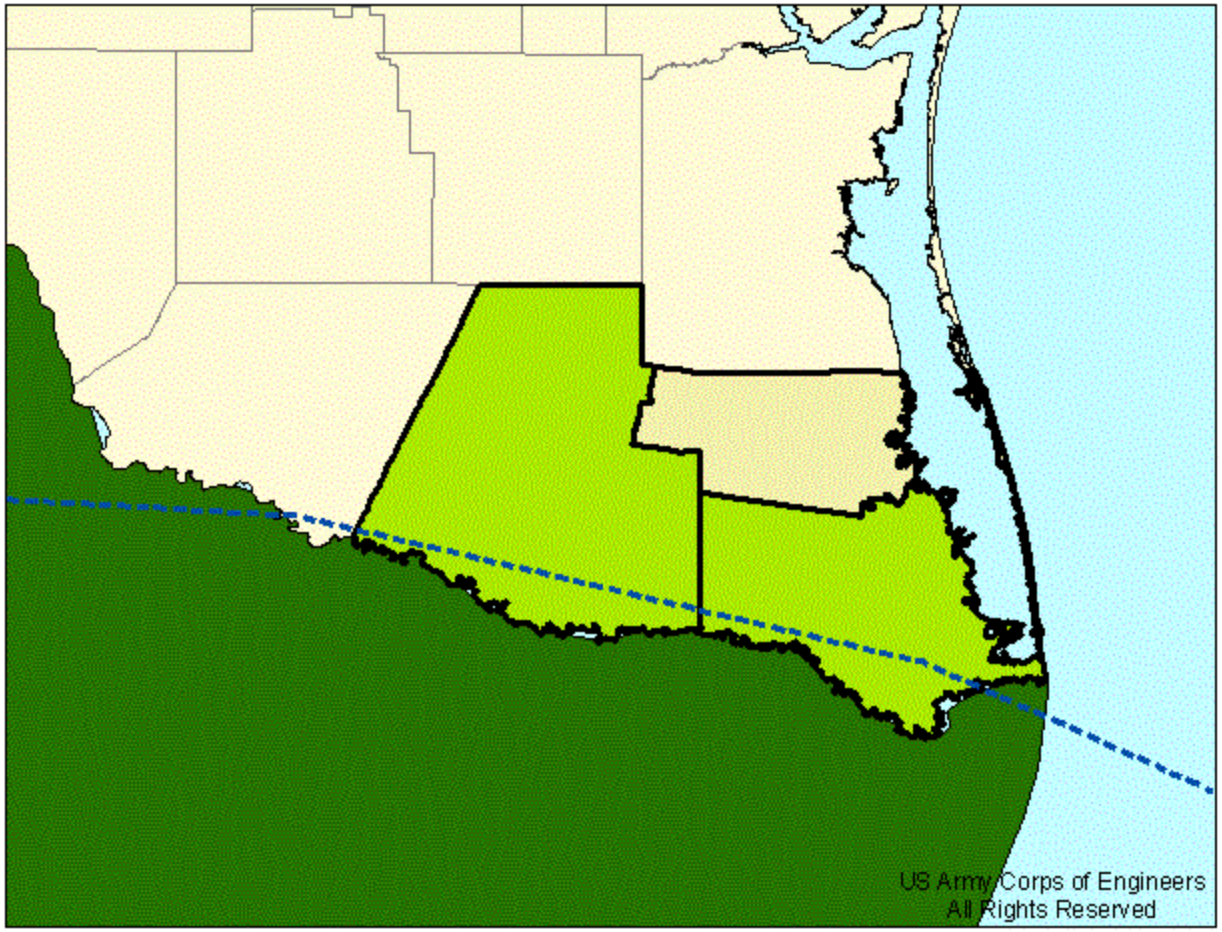
Sources:
HURREVAC
LRL-DEBRIS

US Army Corps of Engineers

Hurricane dolly Temporary Roofing Model

Landfall Expected In About 6 Hours

For Planning Purposes Only!



Post Landfall Temporary Roofing Model Results

Texas - 10,000

Model results per County on following page

This model is based on a Category 1 storm making landfall near Brownsville, TX.

Forecast Track

Temporary Roofing

- < 2,000 units
- 2,000 - 3,999 units
- 4,000 - 5,999 units
- 6,000 - 9,999 units
- > 10,000 units

Information provided on this page displays a Category 1 storm making landfall near Brownsville, TX. These projections are based on information from the NHC (0700 EDT 07/23/2008) forecast. Temporary roofing is based on 4% in CAT 1.

Details about this model may be obtained at http://www.englinkusace.army.mil or contact Louisville District staff at DLL-CELRL-GIS@usace.army.mil

Hurricane dolly Roofing Model	
Generated By: Siemsen, LRL 0730 EDT 07/23/2008	
Sources: HURREVAC LRL-DEBRIS	Page 6 of 19

US Army Corps of Engineers

Hurricane dolly Temporary Roofing Model

Landfall Expected In About 6 Hours

For Planning Purposes Only!

State	House Units per State	County	House Units per County
Texas		Cameron	4,500
		Hidalgo	5,500
		Willacy	< 100
Texas	10,000		

Temporary roofing is based on 4% in CAT 1.

Details about this model may be obtained at http://www.englink.usace.army.mil
or contact Louisville District staff at DLL-CELRL-GIS@usace.army.mil

Source: US Army Corps of Engineers, All Rights Reserved

Hurricane dolly Roofing Model

Generated By:
Siemsen, LRL 0730 EDT 07/23/2008

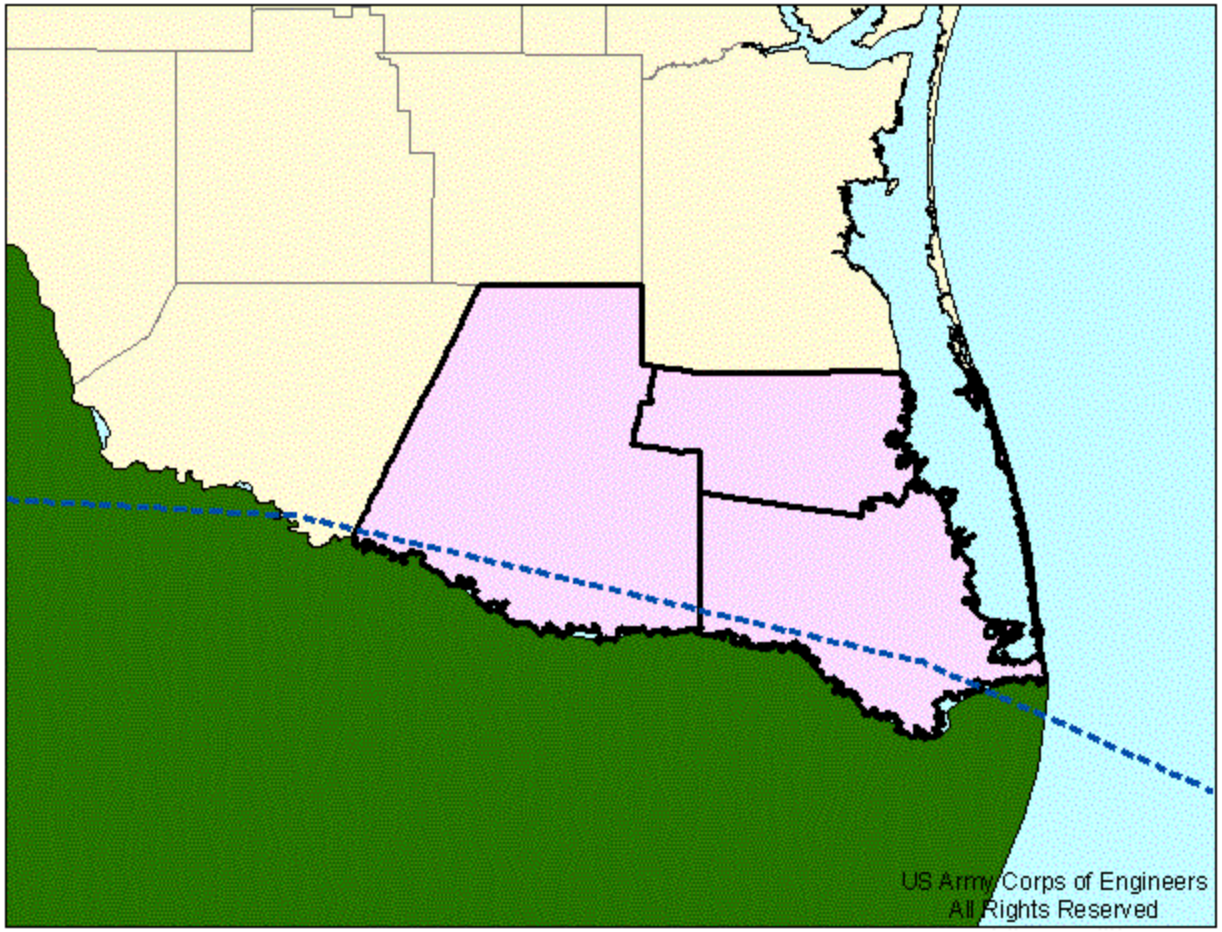
Sources:
HURREVAC
LRL-DEBRIS

US Army Corps of Engineers

Hurricane dolly Temporary Housing Model

Landfall Expected In About 6 Hours

For Planning Purposes Only!



Post Landfall Temporary Housing Model Results

Texas - 2,600

Model results per County on following page

This model is based on a Category 1 storm making landfall near Brownsville, TX.

Forecast Track

Temporary Housing

- < 2,000 units
- 2,000 - 3,999 units
- 4,000 - 5,999 units
- 6,000 - 9,999 units
- > 10,000 units

Information provided on this page displays a Category 1 storm making landfall near Brownsville, TX. These projections are based on information from the NHC (0700 EDT 07/23/2008) forecast. Temporary housing is based on 1% in CAT 1.

Details about this model may be obtained at http://www.englink.usace.army.mil or contact Louisville District staff at DLL-CELRL-GIS@usace.army.mil

Hurricane dolly Housing Model	
Generated By: Siemsen, LRL 0730 EDT 07/23/2008	
Sources: HURREVAC LRL-DEBRIS	Page 8 of 19

US Army Corps of Engineers

Hurricane dolly Temporary Housing Model

Landfall Expected In About 6 Hours

For Planning Purposes Only!

State	House Units per State	County	House Units per County
Texas		Cameron	1,200
		Hidalgo	1,400
		Willacy	< 100
Texas	2,600		

Temporary housing is based on 1% in CAT 1.

Details about this model may be obtained at http://www.englink.usace.army.mil
or contact Louisville District staff at DLL-CELRL-GIS@usace.army.mil

Source: US Army Corps of Engineers, All Rights Reserved

Hurricane dolly Housing Model

Generated By:
Siemsen, LRL 0730 EDT 07/23/2008

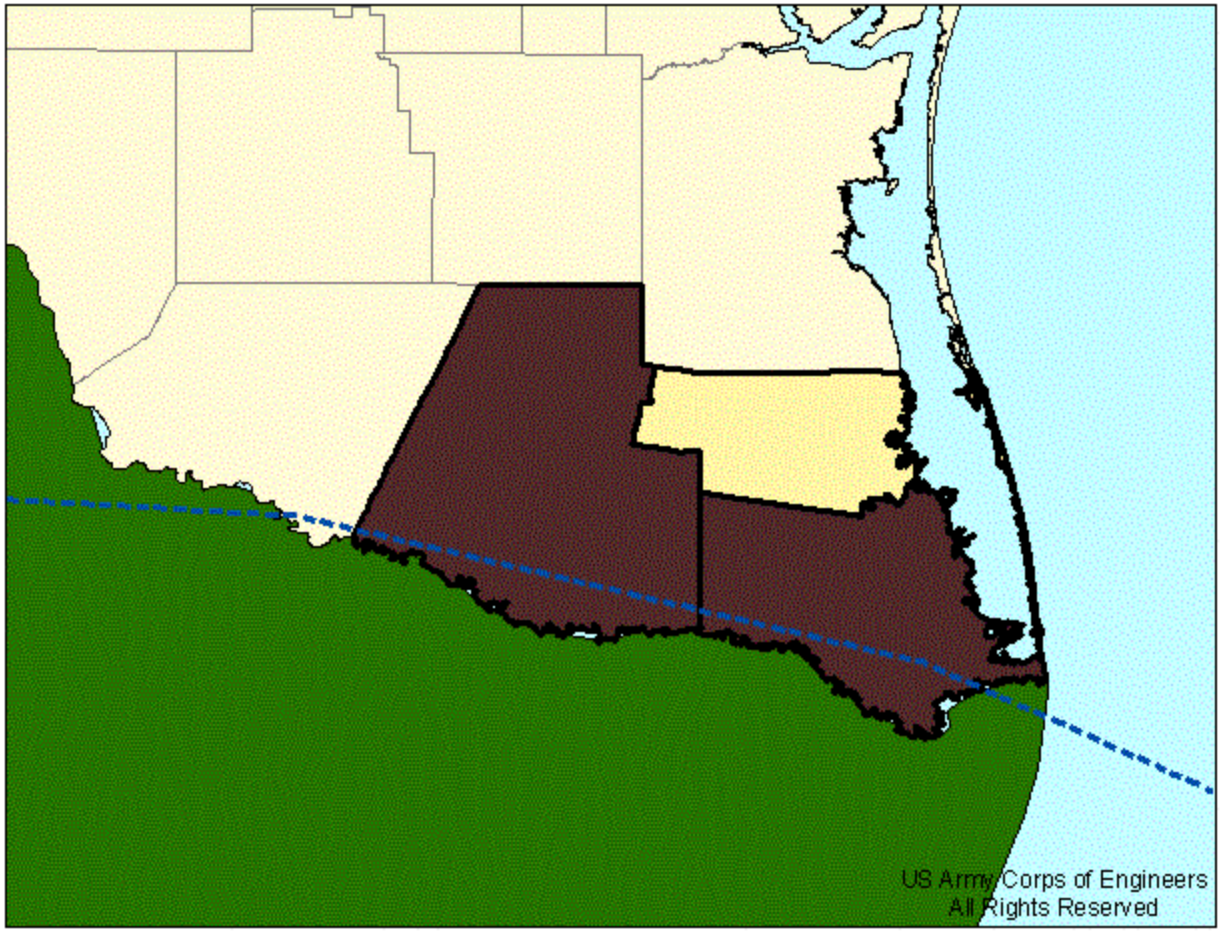
Sources:
HURREVAC
LRL-DEBRIS

US Army Corps of Engineers

Hurricane dolly Population Model

Landfall Expected In About 6 Hours

For Planning Purposes Only!



Post Landfall Population Model Results

Texas - 874,000

Model results per County on following page

This model is based on a Category 1 storm making landfall near Brownsville, TX.

Forecast Track

Population

- < 25,000 persons
- 25,000 - 99,999 persons
- 100,000 - 174,999 persons
- 175,000 - 249,999 persons
- > 250,000 persons

Information provided on this page displays a Category 1 storm making landfall near Brownsville, TX. These projections are based on information from the NHC (0700 EDT 07/23/2008) forecast. The numbers of persons included in this model output are those that would be included within estimated hurricane force winds (Census 2000 values adjusted to July 2007 values).

Details about this model may be obtained at http://www.englinkusace.army.mil or contact Louisville District staff at DLL-CELRL-GIS@usace.army.mil

Hurricane dolly Population Model	
Generated By: Siemsen, LRL 0730 EDT 07/23/2008	
Sources: HURREVAC LRL-DEBRIS	Page 10 of 19

US Army Corps of Engineers

Hurricane dolly Population Model

Landfall Expected In About **6** Hours

For Planning Purposes Only!

State	Population per State	County	Population per County
Texas		Cameron	387,000
		Hidalgo	481,000
		Willacy	6,000
Texas	874,000		

The number of persons estimated to be within the hurricane force winds comes from Census 2000 values adjusted to July 2007 values.

Details about this model may be obtained at http://www.englink.usace.army.mil
or contact Louisville District staff at DLL-CELRL-GIS@usace.army.mil

Source: US Army Corps of Engineers, All Rights Reserved

Hurricane dolly Population Model

Generated By:
Siemsen, LRL 0730 EDT 07/23/2008

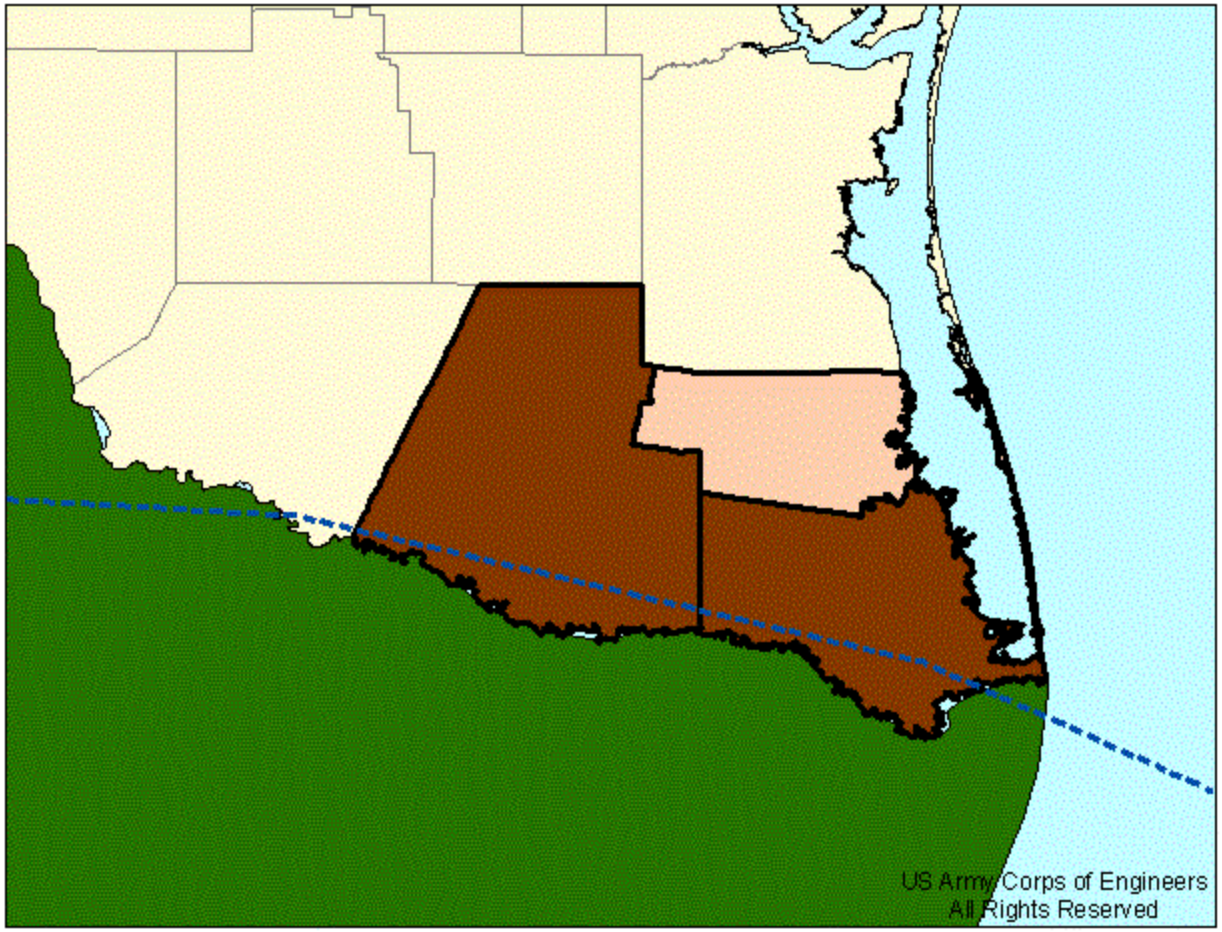
Sources:
HURREVAC
LRL-DEBRIS

US Army Corps of Engineers

Hurricane dolly Households Model

Landfall Expected In About 6 Hours

For Planning Purposes Only!



0 50 100 Miles

Post Landfall Households Model Results

Texas - 251,000

Model results per County on following page

This model is based on a Category 1 storm making landfall near Brownsville, TX.

Forecast Track

Households

- < 7,500 households
- 7,500 - 14,999 households
- 15,000 - 24,999 households
- 25,000 - 49,999 households
- > 50000 households

Information provided on this page displays a Category 1 storm making landfall near Brownsville, TX. These projections are based on information from the NHC (0700 EDT 07/23/2008) forecast. The numbers of households included in this model output are those that would be included within estimated hurricane force winds (Census 2000 values adjusted to July 2007 values).

Details about this model may be obtained at http://www.englinkusace.army.mil or contact Louisville District staff at DLL-CELRL-GIS@usace.army.mil

Hurricane dolly Households Model	
Generated By: Siemsen, LRL 0730 EDT 07/23/2008	
Sources: HURREVAC LRL-DEBRIS	Page 12 of 19

US Army Corps of Engineers

Hurricane dolly Households Model

Landfall Expected In About 6 Hours

For Planning Purposes Only!

State	Households per State	County	Households per County
Texas		Cameron	113,000
		Hidalgo	136,000
		Willacy	2,000
Texas	251,000		

The number of households estimated to be within the hurricane force winds comes from Census 2000 values adjusted to July 2007 values.

Details about this model may be obtained at http://www.englink.usace.army.mil
or contact Louisville District staff at DLL-CELRL-GIS@usace.army.mil

Source: US Army Corps of Engineers, All Rights Reserved

Hurricane dolly Households Model

Generated By:
Siemsen, LRL 0730 EDT 07/23/2008

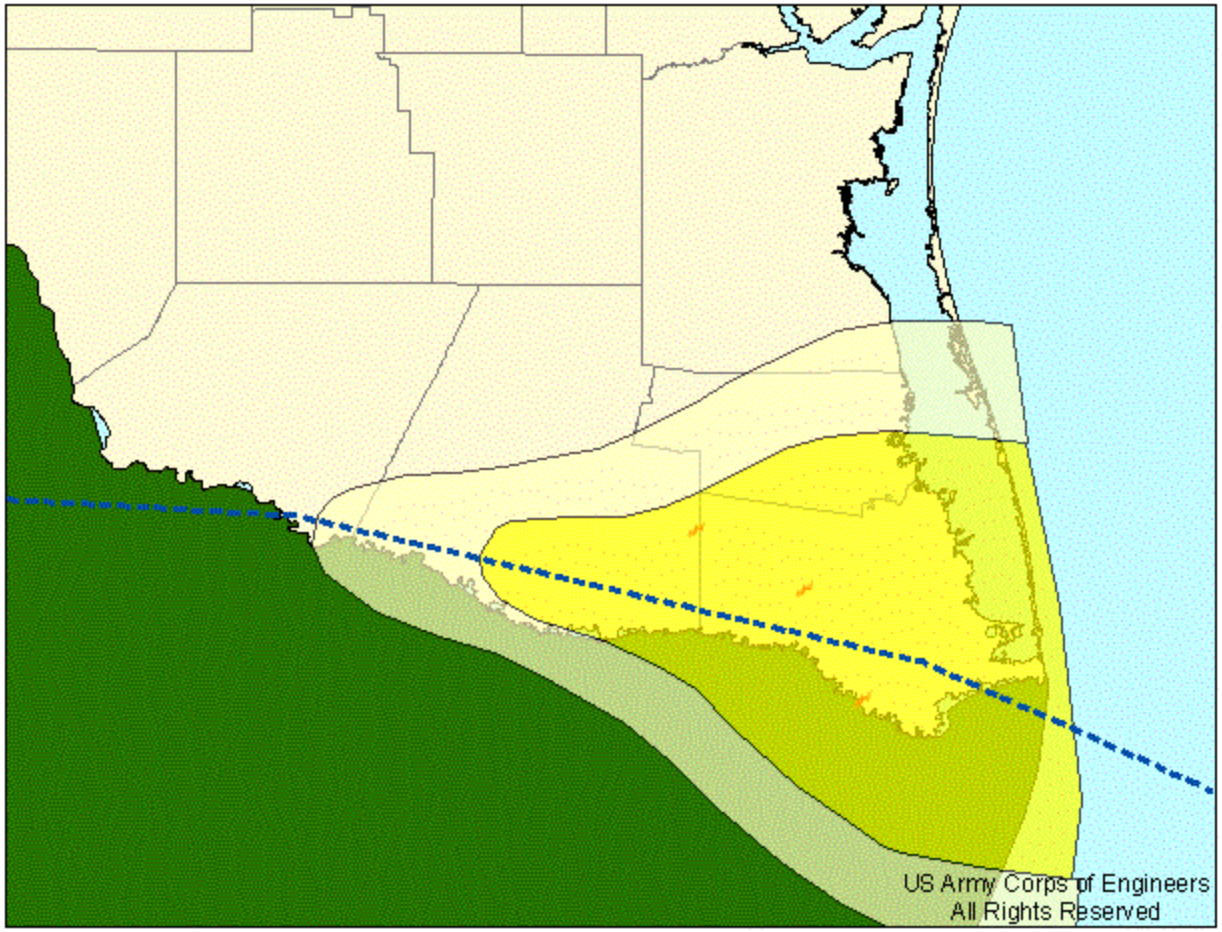
Sources:
HURREVAC
LRL-DEBRIS

US Army Corps of Engineers

Hurricane dolly Electric Power Plants

Landfall Expected In About 6 Hours

For Planning Purposes Only!



0 50 100 Miles

Most Probable Landfall Electric Power Plants Inside Hurricane Force Winds

Texas - 3

Model results per County on following page

This model is based on a Category 1 storm making landfall near Brownsville, TX.

Electric Power Plants

Forecast Track

Information provided on this page displays a Category 1 storm making landfall near Brownsville, TX. These projections are based on information from the NHC (0700 EDT 07/23/2008) forecast.

The number of electric power plants included in this output are those that would be included within estimated hurricane force winds (data source: Homeland Security Infrastructure Program).

Details about this model may be obtained at http://www.englinkusace.army.mil or contact Louisville District staff at DLL-CELRL-GIS@usace.army.mil

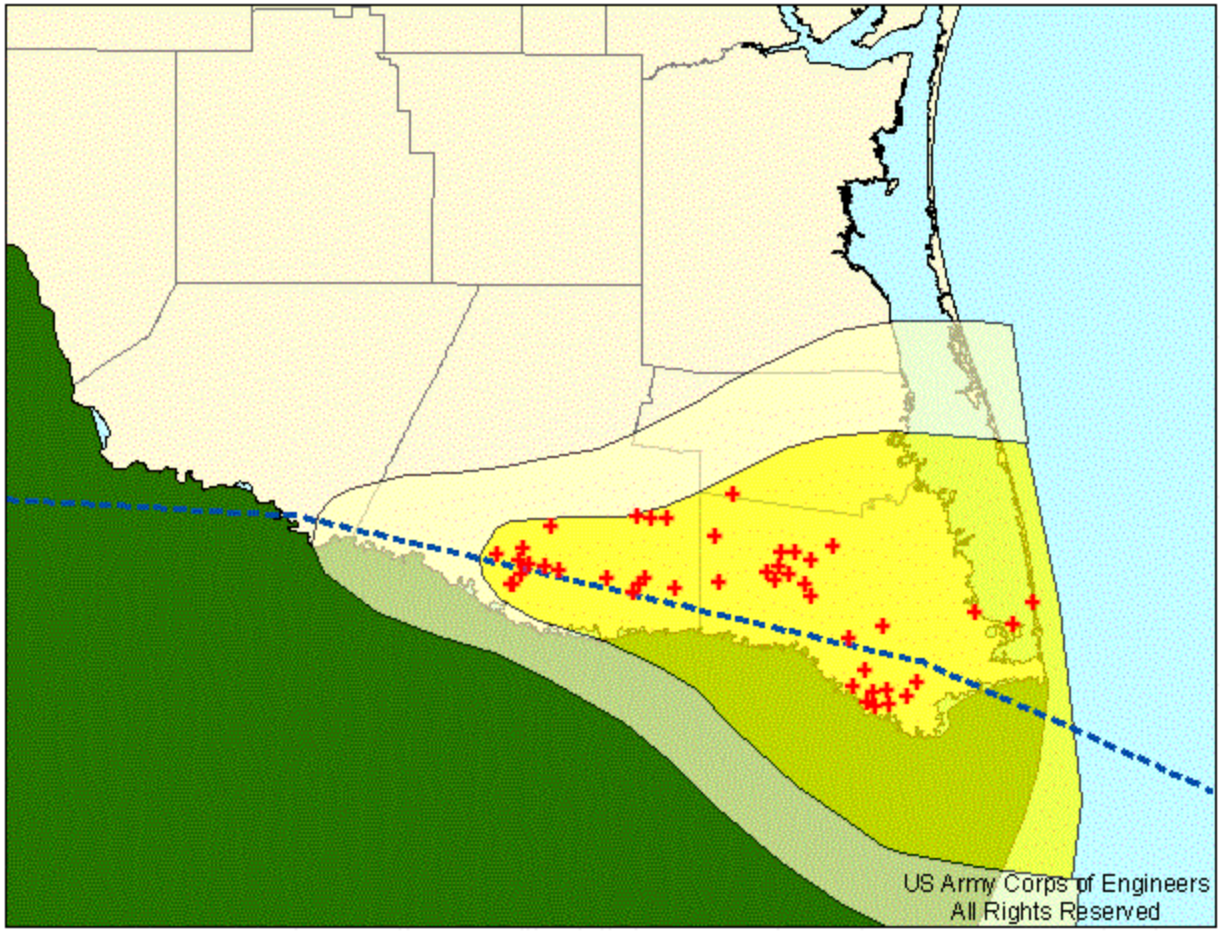
Hurricane dolly Electric Power Plants	
Generated By: Siemsen, LRL 0730 EDT 07/23/2008	
Sources: HURREVAC LRL-DEBRIS	

US Army Corps of Engineers

Hurricane dolly Fire Stations

Landfall Expected In About 6 Hours

For Planning Purposes Only!



Most Probable Landfall Fire Stations Inside Hurricane Force Winds

Texas - 45

Model results per County on following page

This model is based on a Category 1 storm making landfall near Brownsville, TX.

+ Fire Stations

Forecast Track

Information provided on this page displays a Category 1 storm making landfall near Brownsville, TX. These projections are based on information from the NHC (0700 EDT 07/23/2008) forecast.

The number of fire stations included in this output are those that would be included within estimated hurricane force winds (data source: Homeland Security Infrastructure Program).

Details about this model may be obtained at http://www.englinkusace.army.mil or contact Louisville District staff at DLL-CELRL-GIS@usace.army.mil

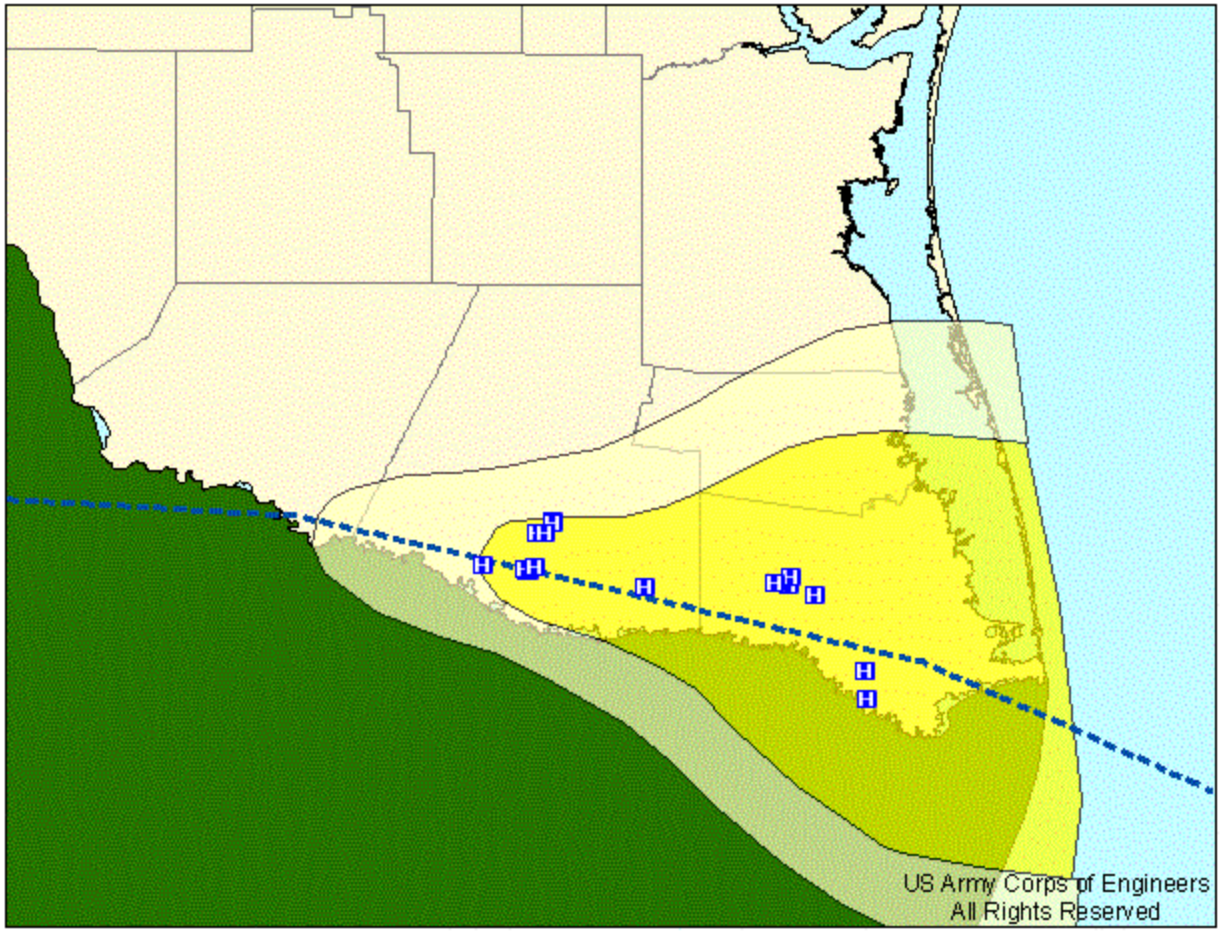
Hurricane dolly Fire Stations	
Generated By: Siemsen, LRL 0730 EDT 07/23/2008	
Sources: HURREVAC LRL-DEBRIS	Page 15 of 19

US Army Corps of Engineers

Hurricane dolly Hospitals

Landfall Expected In About 6 Hours

For Planning Purposes Only!



Most Probable Landfall Hospitals Inside Hurricane Force Winds

Texas - 17

Model results per County on following page

This model is based on a Category 1 storm making landfall near Brownsville, TX.

H Hospitals

Forecast Track

Information provided on this page displays a Category 1 storm making landfall near Brownsville, TX. These projections are based on information from the NHC (0700 EDT 07/23/2008) forecast.

The number of hospitals included in this output are those that would be included within estimated hurricane force winds (data source: Homeland Security Infrastructure Program).

Details about this model may be obtained at http://www.englinkusace.army.mil or contact Louisville District staff at DLL-CELRL-GIS@usace.army.mil

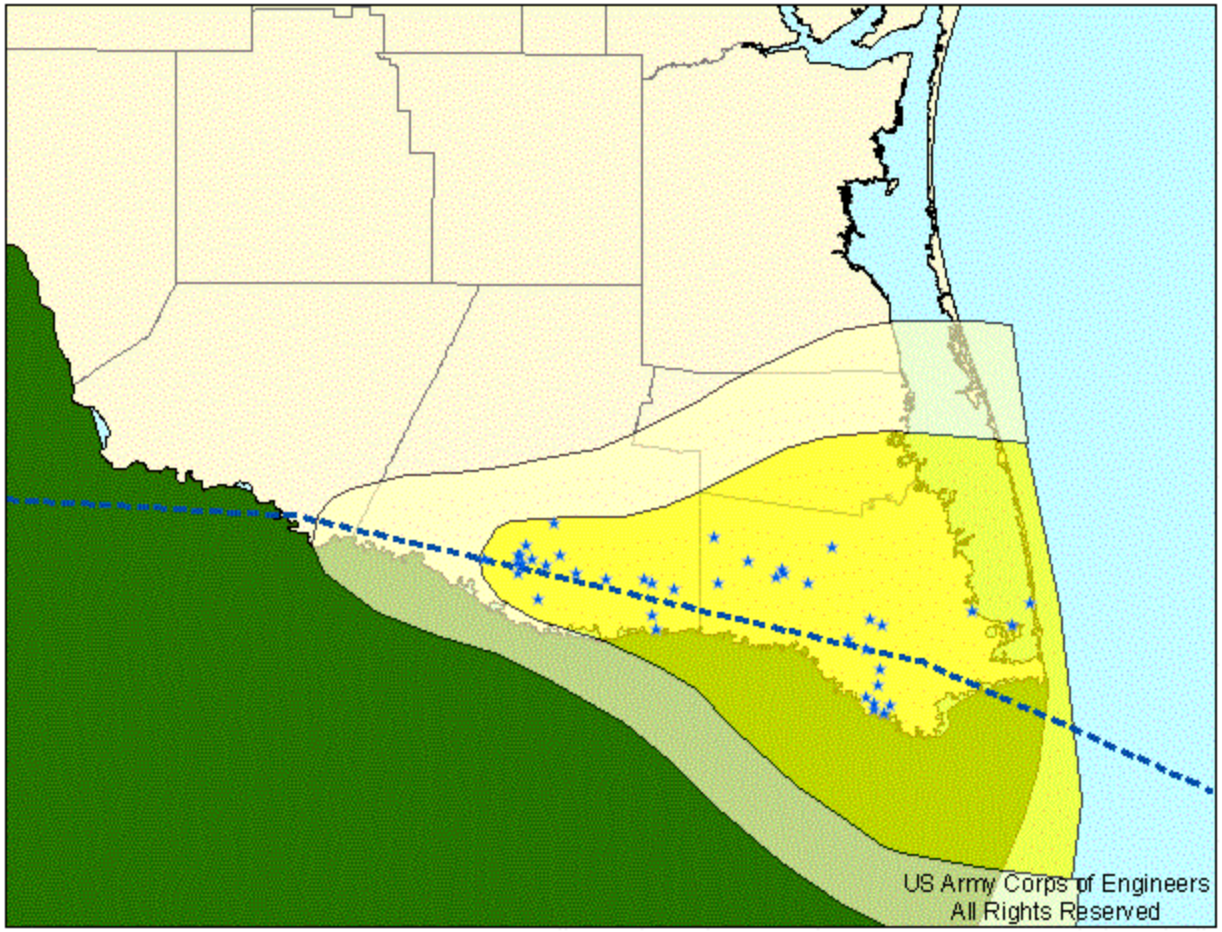
Hurricane dolly Hospitals	
Generated By: Siemsen, LRL 0730 EDT 07/23/2008	
Sources: HURREVAC LRL-DEBRIS	Page 16 of 19

US Army Corps of Engineers

Hurricane dolly Law Enforcement

Landfall Expected In About 6 Hours

For Planning Purposes Only!



0 50 100 Miles

Most Probable Landfall Law Enforcement Inside Hurricane Force Winds

Texas - 41

Model results per County on following page

This model is based on a Category 1 storm making landfall near Brownsville, TX.

Law Enforcement

Forecast Track

Information provided on this page displays a Category 1 storm making landfall near Brownsville, TX. These projections are based on information from the NHC (0700 EDT 07/23/2008) forecast.

The number of law enforcement included in this output are those that would be included within estimated hurricane force winds (data source: Homeland Security Infrastructure Program).

Details about this model may be obtained at http://www.englinkusace.army.mil or contact Louisville District staff at DLL-CELRL-GIS@usace.army.mil

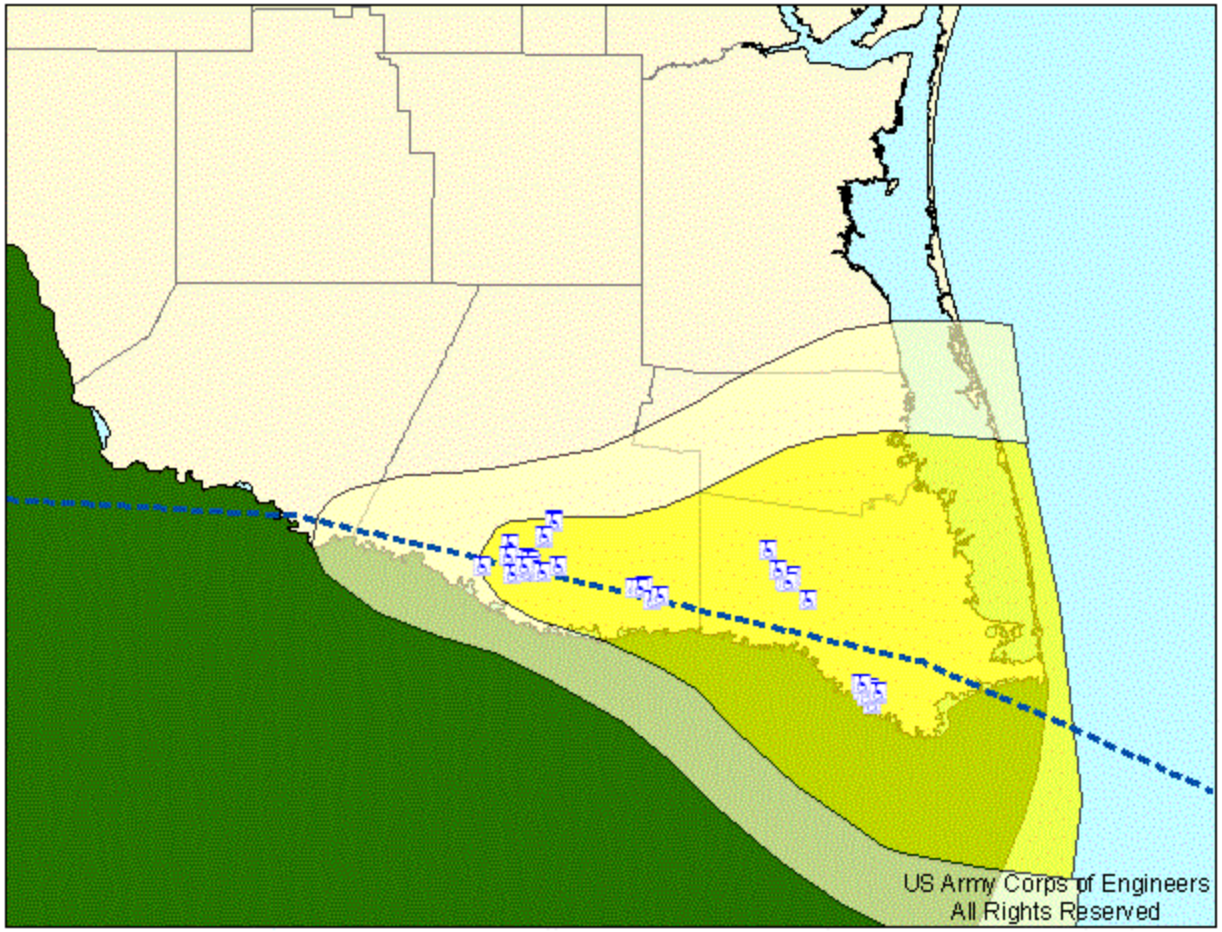
Hurricane dolly Law Enforcement	
Generated By: Siemsen, LRL 0730 EDT 07/23/2008	
Sources: HURREVAC LRL-DEBRIS	

US Army Corps of Engineers

Hurricane dolly Nursing Homes

Landfall Expected In About 6 Hours

For Planning Purposes Only!



0 50 100 Miles

Nursing Homes

Forecast Track

Most Probable Landfall Nursing Homes Inside Hurricane Force Winds

Texas - 43

Model results per County on following page

This model is based on a Category 1 storm making landfall near Brownsville, TX.

Information provided on this page displays a Category 1 storm making landfall near Brownsville, TX. These projections are based on information from the NHC (0700 EDT 07/23/2008) forecast.

The number of nursing homes included in this output are those that would be included within estimated hurricane force winds (data source: Homeland Security Infrastructure Program).

Details about this model may be obtained at http://www.englinkusace.army.mil or contact Louisville District staff at DLL-CELRL-GIS@usace.army.mil

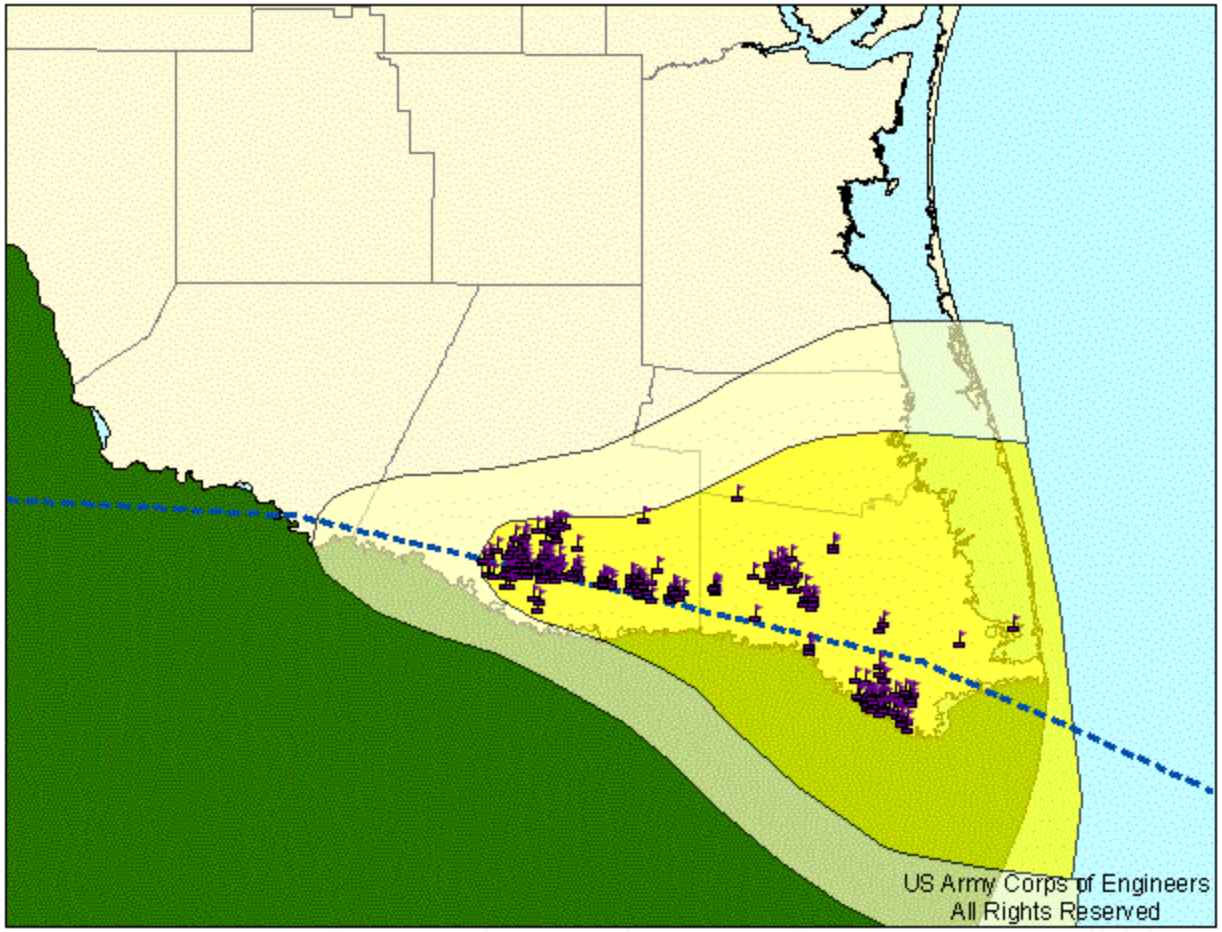
Hurricane dolly Nursing Homes	
Generated By: Siemsen, LRL 0730 EDT 07/23/2008	
Sources: HURREVAC LRL-DEBRIS	Page 18 of 19

US Army Corps of Engineers

Hurricane dolly Schools

Landfall Expected In About 6 Hours

For Planning Purposes Only!



Most Probable Landfall Schools Inside Hurricane Force Winds

Texas - 288

Model results per County on following page

This model is based on a Category 1 storm making landfall near Brownsville, TX.

Information provided on this page displays a Category 1 storm making landfall near Brownsville, TX. These projections are based on information from the NHC (0700 EDT 07/23/2008) forecast.

The number of schools included in this output are those that would be included within estimated hurricane force winds (data source: Homeland Security Infrastructure Program).

Details about this model may be obtained at http://www.englinkusace.army.mil or contact Louisville District staff at DLL-CELRL-GIS@usace.army.mil

Hurricane dolly Schools	
Generated By: Siemsen, LRL 0730 EDT 07/23/2008	
Sources: HURREVAC LRL-DEBRIS	Page 19 of 19